DOCUMENT RESUME

ED 134 701 08 CE 009 303

AUTHOR	Moore, James E.
TITLE	Two Hour Vocational Classes at the Laurel County Area Vocational School. Final Report.
INSTITUTION	Kentucky Vocational Education Region 13, Barbourville.
SPONS AGENCY	Kentucky State Dept. of Education, Frankfort. Bureau of Vocational Education.; Office of Education (DHEW), Washington, D.C.
BUREAU NO	N00810-01
PUB DATE	Jun 76
NOTE	63p.
EDRS PRICE	MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS	*Academic Achievement; Achievement Gains; *Curriculum Development; Data Analysis; *Interinstitutional Cooperation; Post Secondary Education; Research Projects; Secondary Education; *Time Blocks; *Vocational Education
IDENTIFIERS	Kentucky

ABSTRACT

This developmental project with a research component was initiated at the Laurel County Vocational School with the major objective of determining if 2-hour instructional blocks could be operated in programs enrolling only secondary students. Subobjectives involved data gathering and statistical analyses on (1) student achievement, (2) ratings of instruction/instructors by students, and (3) ratings of performance of various factors by teachers. During the 1973-74 school year, class schedules were changed from three hours to two hours in length in the instructional areas of automotive mechanics, carpentry, drafting, industrial electricity, and air conditioning/refrigeration. Major concerns included scheduling problems between the county high school and the vocational school, the increased work load of the vocational school staff, and equipment use and repair necessitated by enrollment of new students. The overall conclusion was that the five program areas offered can be taught on the 2-hour block. The teacher's attitudes remained stable overall. Evaluations of teachers and instruction by students did not vary significantly even though the five program area teachers' ratings were not exactly alike. Student achievement was overall acceptable with significant increases in achievement test scores being noted. Although no specific products were developed as part of the project, other schools would be offered available information and assistance in revision of their traditional 3-hour programs. (HD)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED134701

FINAL REPORT

TWO HOUR VOCATIONAL CLASSES AT THE LAUREL COUNTY AREA VOCATIONAL SCHOOL

by

James E. Moore
Project Director

June, 1976
Vocational Education Region 13
P. O. Box 145
Barbourville, Kentucky 40906

Project Number N00810-01

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

The Research reported herein was performed pursuant to a contract with the Commonwealth of Kentucky, Department of Education, Bureau of Vocational Education, Contractors undertaking projects under such sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official State Department of Education position or policy.

Commonwealth of Kentucky
Department of Education
Bureau of Vocational Education

OE 009 303

Agreement of Nondiscrimination

Title VI of the Civil Rights Act of 1964 states that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance. Therefore, the vocational education research, exemplary and dissemination program of the Commonwealth of Kentucky, like every program or activity receiving financial assistance from the Department of Health, Education and Welfare, must be operated in compliance with this law.

CONTENTS

Section	Page
AGREEMENT OF NONDISCRIMINATION	i
LIST OF TABLES	iii
PREFACE	iv
ABSTRACT	v
INTRODUCTION	1
ACTIVITIES AND ACCOMPLISHMENTS	2
Problem Statement Number I	2
Sub-question I. 1	3
Methodology and Analyses	3
Conclusions and Recommendations	4
Sub-question I. 2	5
Methodology and Analyses	5
Conclusions and Recommendations	6
Problem Statement Number II	7
Methodology and Analyses	7
Conclusions and Recommendations	10
OTHER ACTIVITIES	10
DISSEMINATION ACTIVITIES	11
CONCLUSIONS AND RECOMMENDATIONS	11
SUGGESTIONS FOR IMPLEMENTATION	12
BIBLIOGRAPHY	14
APPENDICES	
I. OHIO TECHNICAL AND INDUSTRIAL EDUCATION TEST SCORES	15
II. THE PURDUE RATING SCALE FOR INSTRUCTION	34
III. THE PURDUE TEACHER OPINIONAIRE RAW SCORES	29
IV. NEWSPAPER RELEASES, ETC.	44

LIST OF TABLES

Number		Page
1	TEACHER OPINION RANKINGS	4
2	STUDENT EVALUATIONS	6
3	"t" VALUES AND DEGREES OF FREEDOM FOR ABRIDGED AND TOTAL OHIO T & I SCORES	9

PREFACE

In the past several years, vocational educators have sought out possible alternatives to the traditional three hour block of instructions offered in area vocational schools. The author would like to express sincere thanks to a cadre of professional educators who helped develop the project, and assisted in mid-course revisions as they became necessary. Members of the Bureau of Vocational Education who met with regional office staff and the Laurel County Board of Education to develop project guidelines. Included in that group were Mr. Hayward Gilliam, Superintendent; Mr. Charles McPhetridge, Instructional Supervisor; and Mr. R. Harold Storm, Principal of the Laurel County High School. Mr. Ray Roundtree, Regional Vocational Education Director represented the Regional staff. Mr. Fred A. Martin, Dr. Charles Wade, Dr. Carl Hurley, Mr. Arnold Wilson, Dr. Herbert Bruce, and Dr. Lynn Fluegge, represented the Department of Education. The school hosting the proposed project was represented by Mr. James E. Moore, Coordinator and the instructional staff, Mr. Hiram Cornett, Mr. Charles Hillard, Mr. Terry Owens, Mr. John Phelps, and Mr. ClevelandWyatt.

Instrumentation for collection of student achievement was made available by the Ohio Department of Education through the efforts of Mr. Ray Rinderer, consultant of the Instructional Materials Laboratory at the Ohio State University. His many hours of assistance deserves special thanks.

Record keeping chores were accurately completed by Ms. Wanda Mays and Ms. Gayle McDaniel who acted as project secretaries during the three years of the project.

ABSTRACT

Title of Project: Two Hour Vocational Classes at the Laurel County Area Vocational School

Project Duration: July 1, 1973 - June 30, 1976

This developmental project with a research component was initiated with one major objective as the thrust. That objective was to determine if two hour instructional blocks could be operated in programs enrolling only secondary students. Sub objectives involved data gathering and statistical analyses on: (1) student achievement, (2) ratings of instruction/instructors by students and (3) ratings of performance of various factors by teachers.

During the 1973-74 school year, class schedules were changed from three hours to two hours in length. Problems inherent in the change became evident soon after classes began. Major concerns included scheduling problems between the Laurel County High School and the Vocational School, the increased work load of the Vocational School staff and equipment use and repair necessitated by enrollment of new students.

As a result of management review, a related instructor was employed within the project, local school officials revised class schedules and additional funds for equipment were made available through an amendment to the original proposal.

The results of this project can have an effect on the area vocational schools in that other schools can have available information and assistance in revision of their traditional three hour programs. Certain conditions must be met if other schools are to have success in similar efforts. Fifteen year old students were included in the project.

No specific products were developed as part of the project. However, each instructor was required, by imposing revised class lengths, to revise his daily lesson plans. The basic curriculum outline developed for related instruction was used as the model for a curriculum guide subsequently developed for all related vocational teachers in Kentucky.

The areas of instruction within the program were Automotive Mechanics, Carpentry, Drafting, Industrial Electricity, and Air Conditioning/Refrigeration.

INTRODUCTION

In 1972, the Kentucky State Board of Education passed a resolution, subsequently numbered "SBE 73.800 LENGTH OF PROGRAM." This regulation contained, in part, the following provisions: "...(3) the program shall be offered on a daily basis on a time schedule which is consistent with good educational practices. (4) New patterns shall be researched and piloted on a limited basis before total acceptance throughout the State."

Discussions were held between the Vocational regional staff and the administration of the Laurel County Board of Education to look into the possibility of revising the traditional three hour instructional programs to two hours at the Laurel County Vocational Education School. The two groups agreed to present orally their opinions to representatives of the Department to determine if a commitment could be obtained from the Department for financial and technical assistance. Results of that meeting were: (1) the Resources Development would prepare a proposal which would meet the requirements for funding for the Bureau of Vocational Education, to include results of similar efforts in other states, and (2) the Regional Director would solicit the State Superintendent of Public Instruction for exception from State Board Regulations requiring three hour instructional blocks at the Vocational School. Both requirements were completed by August 10, 1972. The initial year of the project was funded as a research project.

This effort was the first revision of class length, from three to two hours, in any Kentucky Area Vocational School. Many problems could result in limited success or failure of the effort. Rogers (1962, 1968) cited four major considerations which must be implemented to insure positive changes. They were: (1) the innovation, (2) communication, (3) the school system, and (4) time. Each of the factors are not mutually exclusive. The innovation, consideration one, should not in itself be a problem since all educational groups who would be involved in project operation had agreed that the effort should be undertaken. Communications were not considered as a major source of concern. This was primarily because regular monthly meetings were to be held between the administrators at both schools. Teachers would have periodic staff meetings, counselors would be kept informed and, as a need became evident, special meetings could be called on urgent matters as needed. The Vocational Advisory Council was also involved in an annual report meeting which was attended by all people who were related to the effort. It became evident during the first year that the communication process would be critical to project success or failure. The school system provided some concern but it was felt that effective communication networks could alleviate the problem. The school system most affected was the vocational school. The effort would require total commitment of the instructional staff if any degree of success would be achieved. Time was considered to be quite important. Thomas (1971) stated three time related factors which cause problems. (1) The length of the

student's day, class time would be shortened, the student would have a school day as long as before instituting the project, (2) the school bus program was one strong point in favor of conducting the innovative effort at the Laurel County Vocational School. Since all students also attended the Laurel County High School, on the same campus, no bus transportation of students is required. Busses were used on rainy days to transport students between buildings. (3) The money shortage was not a problem since the Bureau of Vocational Education was committed to support the effort to be sure failure would not be the result of insufficient funding. Another funding source was utilized in a coordinated effort. EPDA funds available to the region would be utilized to contract with Eastern Kentucky University to provide graduate credit in-service to interested people, including the staff at the vocational school. This will be discussed in the activities and accomplishments section of this report.

The project thrust had its greatest impact on the students who were enrolled in the programs offered. Students who were seniors during the first and second year of the project would not be able to earn the full six units of credit. The 73-74 seniors could earn five units, while the 74-75 seniors could earn only 4 units of credit. If the effort is continued into the future, all following years graduates could earn the full six units of high school credits. Special work sessions were established in the summer for students who wanted to increase their credits, up to a maximum of six. Some students took advantage of the opportunity.

ACTIVITIES AND ACCOMPLISHMENTS

The project sought to answer two major questions which were very broad. Specific sub-questions were utilized to determine if statistically significant differences resulted within the broad areas of student achievement and attitudes of the participants.

Problem Statement Number I

> What effect does the change in hours per instructional class have on the teachers, administrators and the community?

For purposes on analyses, it was appropriate to reduce the problem statement into more manageable units for analyses. It was found that virtually no problems were encountered in the community. That process (make-up in summer) was utilized each year so that students with absences during the academic year could return to make-up hours missed.

Sub-question I. 1: Does the change in length of instructions result in any difference of attitudinal scores of teachers as measured by the ten sub-scales of the Purdue Teacher Opinionaire?

METHODOLOGY AND ANALYSES

Data for analyses were collected by utilizing the following paradym, where O represents observation and X indicates the occurrance of the treatment condition:

$$O_1 \quad X_1 \quad O_2 \quad X_2 \quad O_3 \quad X_3 \quad O_4$$

The first observation was collected in August of 1973. Each observation thereafter was taken near the end of the school year in Spring 1974, 1975, and 1976. Individual teacher scores are listed in Appendix III. It should be noted that the data for the first observation was collected from five teachers and the coordinator. All other collections include six teachers and the coordinator. The sixth teacher was added to the staff during the first year of the project.

The following table summarizes the rankings by the total staff on each of the ten sub-scales of "The Purdue Teacher Opinionaire." Ranks were determined by calculating the percent correct of the total possible points on each of the sub-scales. In reviewing individual or annual results, it should be kept in mind that the greater percentage of possible points earned, the less concern or pressure the individual or group feels about that sub-scale. Those sub-scales which rank at or near ten are the areas of greatest concern.

In order to statistically analyze the data in Table 1, it is appropriate to state sub-question I. 1 in null hypothesis form.

Ho: There is no significant statistical relationship between rankings of the sub-scale scores attained by the staff on "The Purdue Teacher Opinionaire." The statistical test utilized was the Coefficient of Concordence with the level for rejection being. 05.

The resulting coefficient of concordence was .670. In order to reject the null hypothesis, an index of . 44 must be exceeded. The null hypothesis was rejected. There is a statistically significant correlation between the data sets.

TABLE 1 TEACHER OPINION RANKINGS

Factors	Fall 73	Spring 74	Spring 75	Spring 76
1. Teacher Rapport with Principal	2	2	1	2
2. Satisfaction with Teaching	5	5.5	4	5
3. Rapport among Teachers	1	1	2	1
4. Teacher Salary	3	5.5	10	10
5. Teacher Load	10	8	8	7
6. Curriculum Issues	8.5	4	5	6
7. Teacher Status	7	9	9	9
8. Community Support of Education	4	10	7	8
9. School Facilities and Services	6	7	3	3
10. Community Pressures	8.5	3	6	4

CONCLUSIONS AND RECOMMENDATIONS

Although the results of previously outlined analyses indicate that the overall attitudes of the staff have not changed during the course of project operation, not all of the factors inventoried were controlled as part of the research project. From the inception of the project, members of the advisory group expressed concern for the teachers' working conditions. It was generally felt that virtually all extra work would fall on the staff for completion. This became evident when each teacher had to prepare for two classes of incoming new students instead of one new class; added lists of students had to be tested; lesson plans totally revised for shorter classes, and an additional laboratory exercise was required each time lab situations were used. In essence, each teacher's work load was increased nearly 50 percent for the experimental program. To overcome this problem, a teacher was employed to develop a curriculum for related instruction. This curriculum consisted of modules of instruction based on commonalities between the five trade areas of instruction. A copy of the course outline is in Appendix IV of this report.

Table 1 indicates the major concerns in the beginning are not necessarily the same at the completion of the project. The factor - teachers load - was perceived as a problem (rated 10) in the first year and, while still of concern, is now rated as seventh overall. Community pressures as perceived by the staff in 1973 have lessened from 8.5 to 4 by 1976. School facilities ranking improved while the community support of education was perceived as good at 4 is now perceived more of a concern with a ranking of 8. The staff has retained a nearly middle ground stance to satisfaction with teaching. The rapport among teachers and with principal was always perceived as a no problem, because it was consistently rated either a one or a two. The biggest concern by the staff presently is indicated by the largest drop in rating from the first to last inventory. That area of concern was salary.

The staff were enrolled in a graduate level course of special problems offered by Eastern Kentucky University at the school during the first semester of the first year. The course was a study of curriculum and related matters which the staff became involved in during the start-up year. After that time, staff members individually signed up for coursework to enhance his own professional needs and goals.

Sub-question I.2: Does the change in hours per instructional class have a significant effect on the attitudes of students to instructions and programs as measured by the Purdue Rating Scale for Instruction?

METHODOLOGY AND ANALYSES

Each of the five technical program area instructors administered the evaluation instruments to his three classes in the same design as the paradym illustrated under sub-question I.1. All class members who were present on a pre-determined date were asked to respond to the twenty six items. This resulted in cell N's which varied from 8 to 27 over the three years of the project. The major underlying assumption on pretesting the first year was that pre-project attitudes and course evaluations would provide non-biased baseline data. The assumption may not be valid because two of the three classes tested by each teacher were new students who had not previously enrolled at the school. The only knowledge of the courses and instructors were obtained from acquaintances, not from actual participation in classes at the vocational school. Therefore, several analyses were performed. All analyses utilized the Chi-square statistic with an alpha level of .05 being exceeded to have a significant difference. The complete data base for these analyses can be found in Appendix II of this report.

The Purdue Rating Scale for Instruction instrument is composed of two parts. Items one through ten allowed for ten different levels of response on each item. Items eleven through twenty-six allowed five response possibilities for

each item. The test manual explains that the two item lengths resulted from the original instrument being made of the first ten items with the remainder of the items being added later. For analyses the first and second years, the chi-square statistic was calculated based on classes by items 1-10 and 11-26 by pre-post test. Results of these analyses are detailed in the first and second annual reports. No reacher's evaluations resulted in a significant difference in either of the first two years of the project. The analyses was based on the mean scores for the two groups of items.

This report will represent an analysis omitting the pre-year one data in accordance with rationale previously developed. The cell scores are the sum of the means of the twenty-six items for each class each year for all teachers.

TABLE 2 STUDENT EVALUATIONS

	Post Yr. 1	Post Yr. 2	Post Yr. 3	TOTAL
Class 1	7393.74	7822.08	7092.45	22308.27
Class 2	7382.00	7815.71	7198.14	22395.85
Class 3	7395.52	7711.94	7097.63	22205.09
TOTAL	22171.26	23349.73	21388.22	66909.21

Chi-square = 1.18 (not significant)

Results of the analysis in Table 2, there is no significant differences in ratings by class over the three years, does not justify any further analysis of the data. This result indicates that, as a group, the curriculum, teacher ratings remained fairly stable across the project time frame. It is interesting to note that the total evaluation of all classes was highest (23349.73) after the second year and lowest (21388.22) after the third year. One could speculate a multitude of hypothesis to explain the phenomenon.

CONCLUSIONS AND RECOMMENDATIONS

It is possible to calculate a variety of chi-square values for the data reported in Appendix II. It would be possible to utilize pre year one data. The data could have been analyzed by individual teacher or to compare the five teachers. Since this was not the intent of the project, the analyses were not calculated.

There was no significant change in evaluations of teachers and instruction by students. This is probably due to the incorporation of EPDA project activities to assist the teachers during the transition of curriculum and daily plans. Graduate college credit was granted to each teacher upon completion of a 'Problems'

course offered by Eastern Kentucky University at the Vocational School during the first year. In the following two years, each teacher was involved in additional professional development activities which were most advantageous to each staff member. It was the intent of this project to assist the teachers in maintaining as constantly as possible, the ratings of teachers by their students.

Problem Statement Number II

Do students achievement, as measured by the Ohio Trade and Industrial Education Tests, result in statistically significant gains in student scores?

METHODOLOGY AND ANALYSES

The paradym utilized under problem statement I was also used for data collection. The analysis employed was the "t" test for repeated measures. Since each program area resulted id different Ohio tests being used, each of the five program areas had to be analyzed separately.

The Ohio T & I tests were utilized because it was felt that those instruments had undergone rigorous development and analysis and would provide more reliable data than teacher made tests. The disadvantage of using the test was that they were designed to cover curriculum taught in Ohio Vocational programs, not Kentucky programs. It was agreed that the following subtests would be appropriate in the analysis for student achievement:

Automotive Mechanics: (1) Applied Math, (2) Basic Operations, (3) Engine, (4) Cooling System, (5) Electrical System, (6) Applied Science, (7) Fuel System, (8) Power Train, and (9) Brakes

Carpentry: (1) Orientation, (2) Blueprint Reading, (3) Applied Math, (4) Applied Science, (5) Foundations, (6) Floor Framing, (7) Wall Framing, (8) Roofing, (9) Insulation, (10) Exterior Finish, (11) Interior Finish, and (12) Special Operations.

Industrial Electricity: (1) Orientation, (2) Direct Current, (3) Magnetism (4) D. C. Motors and Controls, (5) Instrumentation, (6) Alternating Current, (7) A.C. Circuits, (8) Three Phase A.C., (9) A.C. Motors and Controls, (10) Electronics, (11) Planning and Layouts, (12) Branch Circuits, (13) Wiring Methods, (14) Lighting, and (15) Auxiliary Views.

Drafting: (1) Materials & Equipment, (2) Dimensioning, (3) Auxiliary Views, (4) Threads and Fasteners, (5) Production Drawings, (6) Auxiliary Information, (7) Orthographic Projection, (8) Sectional Views, (9) Pictorial Drawings, (10) Geometric Drawing, (11) Lettering, and (12) Reproduction of Drawings.

Refrigeration and Air Conditioning: (1) Magnetism, (2) D.C. Power Sources, (3) D. C. Motor Controls, (4) Instrumentation, (5) A. C. Electricity, (6) A.C. Circuitry, (7) Lighting, and (8) Heating and Air Conditioning.

The greatest handicap in utilizing the above component parts of the Ohio T & I tests was, when the base line data was collected in September 1973, no test was available for Refrigeration and Air Conditioning. The Construction Electricity was used to the degree specified above. The drafting course in this school basically emphasized architectural drawing and the instrument used emphasized mechanical drawing. With many subsections of the test being dropped because specific instructions in the classroom did not fit the Ohio instruments.

This final analysis will provide two separate analyses for the data, one for the abridged scores (scores based only on the subtests specified above), and one analyses for the total scores. This is appropriate since subtest sections not taught as specific entites could have been integrated on an ad hoc basis throughout the course. Data is reported in Appendix I of this report by student number, year and abridged and total points earned.

The following list documents which students were enrolled in each of the five programs.

Auto Mechanics: 001-055, 266-290, 395-397, 402-405, 444-469, 572-574
Carpentry: 056-108, 291-314, 398, 470-492
Drafting: 109-159, 315-342, 400, 401, 500-537, 577
Electricity: 160-214, 343-368, 399, 538-571, 575, 576
Refrigeration and Air Conditioning: 215-265, 369-394, 406-442

For each analysis, the analysis individual "t" tests were used. The analysis paradym is identical for each of the five teachers and is as follows:

	Year 1	Year 2	Year 3
Class 1	2 Hrs.	2 Hrs.	2 Hrs.
Class 2	2 Hrs.	4 Hrs.	4 Hrs.
Class 3	5 Hrs.	4 Hrs.	6 Hrs.

All students who were tested both pre and post after two hours of instruction will be grouped for analysis. This results in four separate analyses for each teacher for abridged scores and four analyses for total Ohio T & I scores.

TABLE 3

"t" Values and Degrees of Freedom
for Abridged and Total Ohio T & I Test Scores

Teacher	Hours of Instruction	Abridged "t" Value	Total "t" Value	Degrees of Freedom
1	2	9.12*	9.09*	48
1	4	6.36*	6.70*	24
1	5	4.39*	3.62*	13
1	6	8.79*	9.08*	10
2	2	7.83*	8.29*	33
2	4	7.52*	7.38*	27
2	5	4.66*	4.52*	15
2	6	4.75*	4.20*	7
3	2	8.54*	4.83*	56
3	4	4.69*	6.56*	21
3	5	.67	.36	12
3	6	5.11*	3.33*	5
4	2	7.31*	7.27*	39
4	4	9.75*	10.71*	29
4	5	4.79*	4.94*	14
4	6	4.63*	4.98*	10
5	2	3.80*	4.13*	25
5	4	11.08*	5.15*	16
5	5	.79	1.25	6
5	6	11.00*	3.50*	2

*Significant beyond .05, one-tailed test

Students who did not complete the test, both pre and post, in an area of instruction were not included in the analysis. Therefore, the total N count in the analysis was less than the total membership of 577 due to several incomplete testings and mid-year program changes.

The statistical analysis for the five hours of instruction is based only on the data taken for the two hours of student involvement in the project. Three hours of their instruction was completed prior to the start of the project.

CONCLUSIONS AND RECOMMENDATIONS

Two groups of students did not result in a significant change: the five hour classes of teachers 3 and 5. Several previously discussed possibilities may have occurred to result in the non-significant differences.

Absences and dropouts were responsible for the number of students which ended up in the twenty groups. The teachers, in numerical order, had 95, 82, 94, 92, and 49 students who provided useable data for analysis. In fact, with an N equal to 2, 5, 6, 7, and 10, the statistical analysis is virtually meaningless. The larger number of students per teacher, the greater the number of students who completed one, two, or three years of the project.

Tests for teacher 3 and 5 were shortened considerably because many questions were not appropriate for the curriculum being taught.

OTHER ACTIVITIES

Part of the information which would not be susceptible to rigorous analysis but was pertinent for use in decisionmaking included the personal observations of the participating teachers and data which indicated the number and year in school of students who prematurely left the program during the year.

One thrust of the project was an assumption that 15 year old students would remain in school past the mandatory age of 16 if they were enrolled in the vocational curriculum at the vocational school. The following data indicate the vocational school early termination rates for the vocational school by year.

1971-72	12
1972-73	18
1973-74	33
1974-75	40
1975-76	44

The data represents a doubling of early terminations the first year with no lessening the second year. The assumption that the two hour block of instruction decreases early terminators can not be substantiated.

It is realized that previously presented data presents the project in an objective manner. The statements to follow represent the consensus of the opinions expressed by one or more of the participating vocational teachers. Their concerns are not grouped into any specific order.

1. Younger students are not sure they want to be in program area
2. Projects take too long to complete
3. Can not perform "live" work
4. Lessened student interest
5. More materials used due to more students being enrolled
6. More wear on equipment
7. Sophomores are not mature enough
8. Students express preference for three hour block (about 95%)
9. Less enthusiasm and less motivation combine to equal a poor attitude
10. Cleanup takes a greater percentage of time in the two hour block

Although these ten items are personal opinions of the staff, they represent personal opinions and perceived opinions of the students that they have worked with during the three years of the experimental effort.

DISSEMINATION ACTIVITIES

Dissemination activities were not funded within the scope of this project. Mass or thin market dissemination of a statewide nature were not undertaken. Included in Appendix IV are copies of all local newspaper releases made as part of the project.

During the first year of the project, and subsequently the second and third year, the staff of the Laurel County School Board, Vocational School and other interested people were invited to participate in open discussions concerning the past functioning of the project. The first year a member of the crafts advisory committee also presented the position of the committee on the innovative effort. Decisions of a management nature were made at each of the annual meetings.

CONCLUSIONS AND RECOMMENDATIONS

This project was initiated at the Laurel County Vocational School because the students who attended the vocational school were also enrolled at the Laurel County High School which was on the same campus. No bussing of students from other schools was required. It was the desire of the county school district to enter into the developmental effort. The staff and administration of the vocational school were also amenable to the two hour block as an experimental approach.

Data analyses resulted in acceptance of the innovation as workable. No achievement data comparable to students at the vocational school could be used in statistical comparisons.

The teacher's attitudes remained stable overall. The evaluations of teachers and instruction by students did not vary significantly even though the five program area teachers ratings were not exactly alike. Student achievement was overall acceptable with significant increases in achievement test scores being noted. (It must be remembered that refrigeration and drafting tests were not as broad as the other three areas).

The overall conclusion is that the five program areas offered at the Laurel County Vocational School can be taught on the two hour block. Vocational education is an ever changing endeavor. As such, it is a dynamic operation which must function in concert with cooperating local schools. During the three years of the effort, philosophies of the students, administration and teachers change. Even though the innovation was successful, other considerations must be included in reaching the final administrative decision on retaining the two hour block or changing to three hour blocks or some other time scheduling. The decision cannot be separated from local student needs, local school regulations or state regulations and policy influences. The annual project meeting was held late in January 1976 at which time lengthy discussions transpired. The group, on a consensus vote, decided to form two committees to provide rationale for the final decision to retain the two hour block, revert to the three hour block or develop an alternate plan. One group was composed of the staff of the vocational school. The second group was composed of counselors and administrators of the Laurel County Board of Education. The two groups, after developing a rationale exchanged documents and met to resolve the two documents into a single consensus opinion which will be implemented during the 1976-77 school year. The two groups met on February 13, 1976 and, after considerable discussion, agreed to return to the three hour block for instruction.

SUGGESTIONS FOR IMPLEMENTATION

The following list of statements outline potential problems when attempting to duplicate the two hour block. If the problems can be addressed and conquered, transition should not be traumatic. Total committment of all personnel involved in the effort is paramount. Those people involved in the classroom instruction and recordkeeping phases are key to the success of the effort. The teaching staff will have to revise lesson plans and laboratory exercises during the early phase of the program change; their committment to the change must be an active committment, not a passive committment.

1. Proximity of students to vocational school
   (a) transportation of pupils from cooperating high schools many miles away results in a large increase in transportation costs.
   (b) coordination of schedules of two or more cooperating high schools so that students get full class time. If a student must board bus and ride 45 minutes each way plus two hours of instruction results in a use of 3 1/2 hours of instruction.

2. Communications and Community Relations

   (a) local administrators must discuss potential program changes with local lay citizenry since it is their children's educational program which will be affected by any change.
   (b) the participating local schools should have a strong positive attitude toward the innovation. The pre planning phases should include all teachers, administrators, and counselors who will be cooperating in the problem solving - decision making efforts in the future.
   (c) the vocational school staff committment:
       the vocational teachers will have to revise curriculum, lesson plans, lab experiences. The increase of work in terms of record keeping, materials and equipment use and repair is obvious. Without the commitment of the staff, the effort will not succeed. This project, during the first year added a related instructor which allowed each program instructor to have an hour per day without students to work on the concerned areas listed above. Professional development assistance is absolutely necessary.
   (d) committment of cooperating agencies in the decision-making and resource allocation areas. The effort must be cooperative with all concerned educators willing to assist professionally and financially by making revisions/ alterations whenever a problem surfaces.
   (e) students should be adequately conseled in terms of selection of program areas as well as what their responsibilities are as participants in the program. They will provide for public relations communication with parents and the citizenry, thereby reinforcing the local committment to the program.

BIBLIOGRAPHY

Rogers, Everett M. Diffusion of Innovation. The Free Press: Glencoe, Illinois, 1962.

Rogers, Everett M. "The Communication of Innovation in a Complex Institution," Educational Record, 49 (Winter, 1968).

Thomas, George I. "The Impact of the Rescheduled School Year on Vocational Training Centers in New York State," University of New York, March, 1971.

APPENDIX I

OHIO TRADE AND INDUSTRIAL EDUCATION SCORES

Each test cycle has two scores, the first of each pair is the abridged score, the second is the total score.

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
001	164	196	223	267	224	275	236	287
002	98	127	145	171	145	177	156	189
003	81	97	79	103	67	81		
004	78	91						
005	72	91	106	123	84	100	166	190
006	77	90						
007	72	90			105	128	157	181
008	67	85	75	96	72	91	76	95
009	64	85	97	118	81	99	163	187
010	72	84						
011	66	84			99	126	137	171
012	64	82	114	135	82	100	167	196
013	67	80			90	110	150	171
014	58	79	123	150	96	115		
015	64	76						
016	61	75	84	107	80	101		
017	60	73	75	88	69	90		
018	53	66	89	109	75	102	129	151
019	113	138	158	191				
020	107	131	160	192	161	203		
021	84	110	103	130	98	123		
022	88	109						
023	87	107	118	154	130	164		
024	83	106	168	206	152	185		
025	81	106	75	95				
026	82	100	106	128	86	111		
027	79	97						
028	77	97						
029	81	96	98	123	84	100		
030	77	93	142	173	148	187		
031	74	90	86	112				
032	69	90			130	162		
033	70	84	98	127	64	107		
034	69	83	121	148	90	107		
035	69	83	134	168	139	167		
036	64	78	66	84	74	87		
037	120	143	150	185				
038	95	121						
039	98	117	116	142				

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
040	92	114	99	118				
041	82	107						
042	76	99	82	99				
043	80	98	77	94				
044	83	98	86	103				
045	75	92						
046	70	92						
047	71	88	91	114				
048	69	88	93	111				
049	69	86	84	100				
050	67	83						
051	114	139	158	184				
052	92	114	112	146				
053	71	95	69	79				
054	78	95	89	110				
055	66	84	101	118				
056	87	98	89	104	98	101		
057	79	91	66	77	76	82	81	89
058	72	85	129	142	139	148		
059	72	82	67	74	68	71		
060	69	81						
061	70	80	89	93	92	97	129	134
062	62	75						
063	69	72	143	152	152	157	175	183
064	63	70	62	76	62	66		
065	60	70	92	102	142	152	147	156
066	59	65	55	61	57	59		
067	53	65	72	82	81	86	104	109
068	57	63	73	83	66	70	80	88
069	55	63	83	99				
070	54	62	92	102	92	96	98	100
071	52	60	88	102	96	101	136	141
072	45	56						
073	110	123	152	169				
074	89	95						
075	81	92	114	123				
076	76	89	116	133				
077	75	84	99	108				
078	71	81	103	115	145	149		
079	70	80	73	85				
080	73	78	81	91				
081	69	77	90	100	134	143		
082	64	73	118	130	140	145		

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
083	62	72	67	78	105	111		
084	63	71	130	147	154	160		
085	60	69	88	101	123	131		
086	62	68	77	90	61	64		
087	54	64	92	101	126	132		
088	60	63	80	88				
089			161	185	199	212		
090								
091	132	150	161	181				
092	103	110	129	144				
093	94	105	133	148				
094	83	99	98	113				
095	78	90	109	117				
096	71	82						
097	63	79	93	104				
098	66	78	62	74				
099	67	78	83	92				
100	71	77	65	76				
101	63	75	78	83				
102	65	74	72	83				
103	63	73	85	96				
104	60	72	71	78				
105	64	71	87	100				
106	60	70						
107	63	70	65	77				
108	60	69	62	71				
109	59	84	95	139	97	144		
110	49	75	43	70	40	66	56	84
111	47	74	50	73				
112	47	73			58	86		
113	45	70	50	68	56	91	53	81
114	37	65	54	80	66	102		
115	41	65						
116	41	63	42	77	64	93	69	106
117	37	62	47	83	55	85	55	88
118	38	62	36	63				
119	44	61	50	71				
120	36	61	37	62	41	69	48	68
121	34	59	40	57	37	61		
122	26	53	37	60				
123	31	51	41	65				
124	31	50	50	75	43	67	50	74
125	47	76						
126	55	76	62	84				

17

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
127	45	75	48	66	45	75		
128	47	75	46	79				
129	46	73	41	69	46	69		
130	50	72	63	94				
131	47	71	55	83	59	87		
132	49	71	59	85	58	84		
133	49	70	47	65				
134	50	69	46	77				
135	48	68	55	79	42	67		
136	47	67	44	74	65	105		
137	46	65	43	64	51	81		
138	44	62	30	42				
139	38	57	47	71	60	84		
140	38	53	52	74	57	79		
141	40	48	58	81	54	80		
142	25	46	41	62	61	88		
143	70	107	70	102				
144	72	104	81	120				
145	72	100	60	83				
146	67	100	86	117				
147	66	99						
148	67	98	58	81				
149	65	95	59	83				
150	67	95	68	102				
151	59	91	62	97				
152	52	83	60	89				
153	59	78	49	76				
154	47	70						
155	45	68						
156	43	68	46	66				
157	42	62						
158	38	61	49	76				
159	35	58	40	61				
160	71	88	99	117	138	163	153	176
161	66	78	59	78	62	70	80	102
162	64	82	70	83	96	111	131	159
163	58	76	62	78	93	75	80	100
164	66	77	71	82	69	84	72	82
165	63	75	70	87	64	75		
166	64	73	70	80				
167	62	77	60	74	70	81	82	100
168	63	72	74	93	106	124		
169	53	67						

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
170	62	74	89	105	70	86	119	139
171	56	68	56	69	91	104	102	118
172	52	62						
173	58	71	76	89	81	101	88	109
174	54	63	46	61	61	69		
175	49	61	68	85	61	76	76	91
176	51	62	64	76	48	56	62	78
177			53	64				
178	97	114	112	139	124	148		
179	83	103						
180	70	85	103	119	113	134		
181	72	85	72	91	93	112		
182	67	86	114	132	114	132		
183	70	86	81	99	110	131		
184	71	85	114	140	134	154		
185	61	75	70	88	85	99		
186	66	77	93	113	102	119		
187	63	74	61	77	64	82		
188	63	75	73	93				
189	64	73	95	112	111	129		
190	57	66	74	95	67	82		
191	54	67	87	109	89	109		
192	57	68	72	85	82	101		
193	55	67	65	77	78	95		
194	44	56	86	103	100	121		
195			68	84				
196			84	104	91	105		
197	121	148	143	174				
198	89	114	96	120				
199	83	107	110	133				
200	96	114	109	128				
201	87	107						
202	82	101	104	122				
203	76	94	96	117				
204	77	96	89	105				
205	74	95						
206	73	92	116	137				
207	67	87	82	102				
208	68	83	84	99				
209	61	82	82	98				
210	72	81						
211	64	77	63	78				
212	62	75	47	62				

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
213	63	76	83	104				
214	52	66	70	89				
215	43	88	54	115	78	134		
216	35	91	30	84	41	81		
217	32	91	39	85				
218	34	83	38	73	48	87	74	93
219	36	79	36	81	58	95		
220	29	78	36	80				
221	32	78	38	83	53	79		
222	30	77	27	80				
223	33	74	31	78				
224	43	74	44	90				
225	26	72	29	68				
226	27	71	30	71	41	74	75	89
227	22	69			51	84		
228	33	64	36	78	44	81		
229	32	66	39	90	51	79		
230	24	65	27	67	40	76		
231	28	66	39	84				
232	21	64	32	76				
233	33	60	31	78				
234	39	88						
235	31	88	46	90	49	88		
236	36	82	53	113	69	124		
237	30	79	33	74				
238	31	74	28	77	55	93		
239	26	72						
240	29	76	36	83				
241	35	75	28	42	51	85		
242	32	72						
243	28	66	43	94				
244	25	69	28	77	46	79		
245	25	68	29	70	55	87		
246	31	70						
247	37	74	54	110	57	92		
248	31	63	26	77				
249	21	64	39	83	60	93		
250	26	62	37	76	43	69		
251	19	58						
252	34	72						
253	27	77	42	89				
254	26	72	41	97				
255	29	77	24	66				
256	41	77	23	62				

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
257	35	70						
258	32	78	25	76				
259	31	72						
260	32	72	45	90				
261	34	69						
262	22	63	38	98				
263	26	77						
264	24	76						
265	20	69						
266			80	105				
267			81	102	128	163	172	214
268			82	101			186	229
269			77	96	112	145	144	174
270			79	95	96	126		
271			73	94				
272			70	93	126	157	163	201
273			74	91	146	116	145	185
274			74	90	88	112		
275			68	89				
276			70	88	92	114	148	178
277			73	87			118	137
278			73	87	93	113		
279			64	87	95	114		
280			76	87	95	116	118	140
281			70	85	87	107	108	137
282			60	82	85	110		
283			68	78				
284			61	74				
285			66	85	84	97		
286			90	108				
287			79	101	106	128		
288			81	94	78	101		
289			81	108				
290			74	91	84	98		
291			79	85	109	113		
292			73	79	96	100	110	119
293			74	77	90	95	104	108
294			73	76	108	112	114	123
295			70	76	64	68	88	92
296			72	75	123	126	143	152
297			67	72				
298			62	70	77	78	77	83
299			67	69	79	84	86	89
300			63	69	99	103	107	111

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
301			64	68				
302			64	68				
303			62	66	70	73	98	104
304			61	64			96	103
305			61	62			84	93
306			56	62	86	91	103	110
307			60	60	84	88	96	100
308			54	60	85	87		
309			53	59	77	81	88	93
310					82	87	72	76
311			73	77	90	93	86	90
312			109	117	130	133		
313			75	81	49	53		
314			62	65	80	83		
315			48	75				
316			44	74	56	89	59	91
317			40	71				
318			44	70	44	67	57	87
319			40	68	29	45		
320			42	66	47	76		
321			39	65	43	69		
322			38	63	38	70		
323			34	63				
324			39	62	58	96	49	69
325			37	61	47	72	37	69
326			40	61	43	61	44	69
327			40	59	39	61		
328			31	58	36	57		
329			31	57	60	71		
330			34	54	59	73		
331			33	53	44	65	65	90
332			58	92	57	86		
333			43	72	56	84	65	94
334			40	70				
335			35	61				
336			33	54				
337			40	68	62	88		
338			41	64	64	95		
339			37	64				
340			37	59	61	89		
341			35	56	69	97		
342			39	55				
343			73	88	76	90		

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
344			69	83	82	100		
345			64	81	79	92		
346			69	80				
347			72	80	91	109	102	123
348			71	75			86	107
349			62	74	70	82	73	91
350			59	74	76	93		
351			62	74	68	81	80	94
352			66	72	88	103	105	123
353			65	72	75	90	82	101
354			63	71				
355			58	71	70	80		
356			65	71	84	97		
357			55	69	80	95		
358			58	67	98	115	103	126
359			54	67	77	96	90	108
360			59	66	66	83	88	103
361			55	62	59	72		
362			57	60	81	96	96	116
363			49	60	64	81	53	64
364			75	93	84	101		
365			64	76	66	80	105	128
366			57	64	63	7[illegible]		
367			59	69				
368			59	75	46	58		
369			52	80				
370			50	80				
371			48	76	49	86		
372			40	73				
373			45	76	50	88		
374			45	75	38	72		
375			47	74	51	82		
376			38	74				
377			42	72				
378			43	70	38	65		
379			42	70	37	72		
380			45	69	45	76		
381			43	69	56	83		
382			40	68				
383			41	66				
384			40	65				
385			39	63				
386			46	60	49	78		
387			36	59				

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
388			40	58	50	79		
389			39	72				
390			39	68	41	69		
391			46	68				
392					48	81		
393					52	86		
394					34	61		
395					141	154		
396					82	104		
397					129	154		
398					73	76	63	72
399					69	81		
400					66	106	81	109
401					73	112		
402					70	85	144	168
403					116	146		
404					80	104		
405					83	98		
406					44	79		
407					41	69		
408					48	81		
409					37	63		
410					50	84		
411					42	81		
412					26	40		
413					45	83	55	94
414					51	92		
415					45	72		
416					37	74		
417					49	73		
418					47	76		
419								
420					40	61		
421					42	77		
422					46	77		
423					46	81		
424					33	47		
425					39	73		
426					35	51		
427					42	62		
428					48	77		
429					45	73		
430					41	71		

32

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
431					40	74		
432					52	92		
433					46	73		
434					36	80		
435					45	76		
436					39	75	50	87
437					36	70		
438					44	78		
439					41	66		
440					37	59		
441					37	70		
442					52	77		
443								
444					54	64	139	164
445					79	104	170	201
446					81	99	109	128
447					68	86	105	128
448					105	125	143	183
449					65	81		
450					72	90	108	122
451					91	109	191	233
452					65	71		
453					71	94	140	157
454					64	83	130	153
455					88	111	158	181
456					64	76	97	113
457					86	108	170	205
458					78	100	161	185
459					46	56	140	169
460					90	113	192	226
461					74	90		
462					68	80	111	127
463					76	95	116	141
464					63	76	122	150
465								
466								
467					77	93	156	189
468					68	88	126	154
469					72	83		
470					74	78	101	104
471					65	70	100	105
472					84	87	119	126
473					82	85	102	107
474					71	78		

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
475					70	75		
476					78	83	101	107
477					63	70	68	74
478					43	43	89	95
479					63	67	124	130
480					70	73	101	110
481					78	81	116	123
482					58	63	78	84
483					58	63	71	75
484					85	85	125	134
485					66	72	96	102
486					75	78	95	102
487					57	62		
488					77	82		
489							113	120
490					86	89	102	109
491					51	54	101	105
492					51	54	50	52
493							106	112
494								
495							137	144
496							100	106
497							161	174
498							157	165
499							113	117
500					40	54	50	79
501					48	72		
502					42	63		
503					43	61	50	76
504					47	74	55	81
505								
506					45	73	54	83
507					44	72	62	96
508					52	83	50	60
509					40	72	53	77
510					46	67	51	81
511					51	83	60	84
512					60	88	86	124
513					43	71	50	84
514					52	74	57	84
515					47	78	49	80
516					38	65	65	103
517					36	60	43	65
518					46	74	73	105

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
519					34	58	38	64
520					35	63	35	60
521					29	56		
522					43	67	48	75
523					46	77	50	78
524					43	59	35	59
525					43	64	49	77
526					42	64	38	59
527					56	86	72	104
528					46	62	70	102
529					45	63	58	71
530					42	58	44	68
531					39	58		
532					37	55	40	60
533								
534					32	60	34	58
535					38	68		
536					56	83	63	98
537					50	79	43	69
538					60	76	82	95
539					61	69	85	102
540					68	81	68	82
541					71	82	85	102
542					54	66	97	117
543					86	108	108	132
544					59	69	74	88
545					50	63		
546					61	74	72	84
547					63	75	70	85
548					70	82	77	92
549					59	68		
550					57	64	66	78
551					45	54	64	77
552					62	75	82	96
553							39	67
554								
555								
556					72	88	90	109
557					72	82	79	97
558					78	94	76	89
559					70	85		
560					59	69	83	98
561					43	56	85	106

Student Number	Year 1 Pre		Year 2 Pre		Year 3 Pre		Year 3 Post	
562					47	58	88	101
563					60	70	53	64
564							119	140
565							85	101
566					71	83		
567					53	65	78	90
568					60	67	72	84
569					63	76	80	93
570					67	76	68	79
571					70	82	81	93
572					54	67	122	152
573					72	87		
574					81	95	158	193
575					57	71	79	101
576					55	65	65	73
577					49	73	63	86
578								
579								
580								
581								
582								
583								
584								
585								
586								
587								
588								
589								
590								
591								
592								
593								
594								
595								
596								
587								
598								
599								
600								
601								

APPENDIX II

Raw Data
"The Purdue Teacher Opinionaire"
Fall, 1973

	Factors										
Teacher	1	2	3	4	5	6	7	8	9	10	Total
1	80	80	55	32	37	19	31	18	16	17	385
2	76	76	53	27	42	20	30	20	23	19	386
3	74	73	54	20	39	14	29	17	17	16	353
4	74	64	57	22	27	17	26	20	14	18	339
5	80	68	55	21	34	20	24	16	17	16	351
6	78	73	55	33	35	14	27	19	18	18	370
Total	462	434	329	155	214	104	167	110	105	104	2,184
Mean	77.0	72.3	54.8	25.8	35.7	17.3	27.8	18.3	17.5	17.3	364
Possible	80	80	56	28	44	20	32	20	20	20	400

Spring, 1974

	Factors										
Teacher	1	2	3	4	5	6	7	8	9	10	Total
1	80	75	60	28	42	20	31	19	20	20	395
2	79	77	56	26	38	18	28	14	15	20	371
3	77	70	56	25	42	17	27	13	18	19	364
4	76	75	56	26	40	18	27	20	20	20	378
5	76	63	53	25	36	20	25	13	20	19	350
6	76	76	50	24	35	18	23	15	17	17	351
7	79	74	52	24	40	17	27	15	15	19	362
Total	543	510	383	178	273	128	188	109	125	134	2,571
Mean	77.6	72.8	54.7	25.4	39.0	18.3	26.8	15.6	17.8	19.1	367.3
Possible	80	80	56	28	44	20	32	20	20	20	400

30

Spring, 1975

Teacher	Factor 1	2	3	4	5	6	7	8	9	10	Total
1	80	77	56	22	42	19	31	19	20	20	386
2	77	64	50	21	34	16	24	16	17	13	332
3	80	64	56	21	42	18	27	20	20	20	368
4	72	68	55	21	24	13	21	15	15	17	321
5	79	73	48	11	27	19	16	9	17	7	306
7	80	75	55	23	42	19	25	17	19	20	375
Total	468	421	320	119	211	104	144	96	108	97	2,088
Mean	78.0	70.2	53.3	19.8	35.2	17.3	24.0	16.0	18.0	16.2	348
Possible	80	80	56	28	44	20	32	20	20	20	400

31

Spring, 1976

	Factor										
Teacher	1	2	3	4	5	6	7	8	9	10	Total
1	80	79	56	25	43	20	31	18	20	20	392
2	79	73	56	23	39	20	26	16	19	18	369
3	77	64	55	15	41	12	24	17	20	15	340
4	79	67	56	21	26	14	25	16	16	18	338
5	80	60	55	15	35	20	16	13	19	15	356
6	73	76	55	17	37	18	24	18	18	20	356
7	78	73	54	17	37	17	20	16	17	19	348
Total	546	492	387	133	258	121	166	114	129	125	2,471
Mean	78.0	70.3	55.3	19.0	36.8	17.3	23.7	16.3	18.4	17.8	353
Possible	80	80	56	28	44	20	32	20	20	20	400

APPENDIX III

TEACHER 1

Pre Year 1			Pre Year 2		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
86.25	90.59	98.95	92.86	95.00	97.50
88.75	91.18	89.47	89.29	86.43	91.25
89.38	84.71	88.95	88.57	92.86	97.50
83.75	91.76	83.16	87.86	87.86	96.25
78.75	89.41	91.05	90.71	85.00	96.25
82.50	87.65	89.47	86.43	89.29	90.00
85.00	91.18	85.26	84.29	86.43	95.00
81.88	88.82	94.21	89.29	85.71	96.25
92.50	94.12	95.26	96.43	95.71	98.75
92.50	90.00	91.58	92.86	92.14	98.75
47.50	47.65	44.21	38.57	40.71	47.50
46.88	47.06	44.74	43.57	44.29	46.25
47.50	47.65	43.16	40.71	43.57	43.75
47.50	45.29	45.26	41.43	38.57	47.50
45.63	48.24	45.79	47.14	42.14	42.50
48.13	47.65	42.11	40.71	42.14	42.50
47.50	48.24	38.95	47.86	42.14	42.50
44.38	46.47	43.16	39.29	42.86	47.50
46.25	47.65	45.26	43.57	43.57	42.50
48.75	49.41	44.21	41.43	43.57	42.50
46.25	46.47	41.58	35.00	39.29	41.25
46.88	48.82	43.16	39.29	40.00	47.50
45.63	45.88	45.26	37.86	40.71	47.50
46.25	47.65	44.21	37.86	42.14	46.25
43.75	48.24	40.53	34.29	45.00	41.25
46.25	48.82	48.42	50.00	45.00	48.75
Total					
1606.29	1660.61	1607.37	1557.17	1572.11	1675.00
N=16	N=17	N=19	N=14	N=14	N=8

TEACHER 1

Pre Year 3			Post Year 3		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
90.48	97.50	98.21	95.50	91.67	93.08
94.29	90.83	94.12	86.50	88.00	84.62
89.05	96.67	98.24	88.00	80.67	86.15
92.38	92.50	91.76	91.50	79.33	90.77
85.71	94.17	94.12	85.00	77.33	86.92
88.57	93.33	95.88	87.00	82.00	89.23
83.81	92.50	96.47	86.00	76.00	90.00
89.85	95.00	97.65	78.50	72.00	88.46
96.67	95.83	97.65	96.50	80.67	94.62
88.57	93.33	97.65	85.00	86.00	89.23
42.86	45.83	47.06	37.50	46.67	38.46
42.38	46.67	47.65	39.50	44.00	41.54
43.33	39.17	47.65	37.00	43.33	39.23
44.29	42.50	48.82	37.00	40.67	39.23
46.19	43.33	47.06	42.50	44.00	40.00
44.29	45.00	45.29	36.50	38.00	37.69
43.33	43.33	47.06	40.00	46.67	43.08
40.95	45.83	47.06	37.50	44.00	41.54
46.67	46.67	46.47	44.50	42.00	42.31
42.38	43.33	46.47	38.50	44.67	40.77
40.48	44.17	48.24	37.00	39.33	46.15
43.81	42.50	46.47	40.50	44.00	43.85
43.33	45.00	45.88	36.50	42.00	42.31
42.38	44.17	45.88	42.00	40.00	41.54
41.90	40.83	46.47	37.00	40.67	47.69
47.62	47.50	48.24	45.50	46.67	42.31
Total					
1595.57	1647.49	1713.55	1508.50	1503.35	1560.78
N=21	N=12	N=17	N=20	N=15	N=13

TEACHER 2

Pre Year 1			Pre Year 2		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
98.75	98.18	96.47	85.00	95.56	99.23
90.00	98.18	95.29	87.00	86.67	97.69
88.12	97.27	90.59	92.00	88.89	86.92
94.38	96.36	100.00	77.00	96.67	92.31
96.25	100.00	97.06	75.50	88.89	93.85
91.25	96.36	91.76	77.00	87.78	95.38
90.63	91.82	95.88	82.50	88.89	95.38
91.88	96.36	97.65	76.00	87.78	92.31
92.50	98.18	99.41	85.50	92.22	96.15
95.63	95.45	95.88	92.50	96.67	90.00
48.13	47.27	48.24	38.50	42.22	40.00
46.88	43.64	48.24	36.50	32.22	45.38
44.38	47.27	48.24	38.50	44.44	40.77
45.00	46.36	47.65	40.00	36.67	44.62
46.88	48.18	48.82	40.50	43.33	43.85
46.25	47.27	49.41	42.50	37.78	44.62
48.13	47.27	47.06	38.00	37.78	46.92
46.25	45.45	49.41	35.00	41.11	45.38
45.63	49.09	46.47	40.50	40.00	45.38
44.38	48.18	47.06	35.50	43.33	46.92
45.63	45.45	47.06	31.50	34.44	43.85
45.63	48.18	48.82	36.00	40.00	46.15
45.00	45.45	47.06	33.50	36.67	45.38
44.38	46.36	48.24	34.50	42.22	43.08
45.00	44.55	47.65	33.00	42.22	43.08
48.75	48.18	48.24	42.00	44.44	47.69
Total					
1665.70	1716.31	1727.66	1426.00	1548.89	1652.29
N=16	N=11	N=17	N=20	N=9	N=13

TEACHER 2

Pre Year 3			Post Year 3		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
95.93	97.65	98.67	96.67	91.50	95.29
86.67	96.47	88.67	90.00	81.00	89.41
90.37	95.88	94.67	91.33	91.00	87.65
88.89	95.88	92.67	82.67	88.50	92.35
90.00	88.82	86.67	90.00	83.50	88.82
87.04	95.29	93.33	87.33	86.50	87.06
92.22	95.88	90.00	87.33	84.00	89.41
87.78	90.59	86.67	80.67	70.50	78.82
91.48	88.24	90.67	92.00	85.50	83.53
91.48	90.00	91.33	87.33	92.50	89.41
42.59	45.29	44.00	42.67	42.50	43.53
45.56	43.53	42.00	44.67	39.00	44.71
42.22	44.12	43.33	44.00	43.50	40.59
41.48	45.88	44.67	42.00	41.50	40.59
45.93	44.12	42.67	41.33	43.50	40.00
44.07	42.35	44.67	44.00	41.00	36.47
45.93	45.29	43.33	43.33	45.50	37.06
40.00	41.18	42.00	39.33	43.50	32.35
39.26	44.12	41.33	44.67	41.50	31.76
41.48	43.53	44.67	44.67	46.00	34.71
40.37	42.35	41.33	36.00	41.00	38.24
43.33	44.71	44.00	42.67	46.50	35.88
38.52	43.53	42.00	37.33	41.00	39.41
42.22	45.29	44.67	41.33	43.50	37.06
37.78	38.24	38.00	27.33	38.50	34.12
47.78	47.06	47.33	48.00	46.50	42.35
Total					
1580.38	1635.29	1603.35	1548.66	153900	1440.58
N=27	N=17	N=15	N=15	N=20	N=17

TEACHER 3

Pre Year 1			Pre Year 2		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
92.50	92.22	99.23	90.00	85.00	80.00
95.63	86.67	77.69	85.88	73.33	76.67
94.38	90.00	88.46	94.71	85.83	78.33
96.25	88.33	90.00	83.53	81.67	77.50
91.88	86.11	86.92	89.41	78.33	72.50
95.63	91.67	90.00	88.82	80.00	75.83
95.00	85.00	86.92	90.00	81.67	84.17
92.50	87.78	87.69	77.06	80.83	75.00
93.75	95.00	93.08	95.29	87.50	90.83
91.25	88.33	90.00	84.71	83.33	86.67
44.38	42.22	46.15	37.65	38.33	38.33
43.13	45.56	48.46	38.82	38.33	40.00
44.38	41.11	41.54	35.29	39.17	35.00
45.00	45.00	46.92	38.82	36.67	35.00
45.63	43.33	48.46	39.41	41.67	39.17
45.00	43.33	46.15	38.24	39.17	40.00
45.00	45.00	46.92	38.82	38.33	40.00
46.25	41.11	45.38	37.06	40.00	39.17
43.75	42.22	43.08	36.47	35.83	40.83
44.38	42.78	43.08	37.65	39.17	39.17
42.50	43.33	39.23	33.53	33.33	38.33
42.50	42.22	44.62	37.65	40.00	42.50
42.50	39.44	43.85	36.47	39.17	37.50
43.75	37.78	44.62	37.06	35.83	39.17
45.00	40.00	43.08	33.53	36.67	35.83
46.25	41.67	46.15	41.76	39.17	36.67
Total					
1648.17	1567.21	1607.68	1477.64	1428.33	1414.17
N=16	N=18	N=13	N=17	N=12	N=12

TEACHER 3

Pre Year 3			Post Year 3		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
93.13	90.00	80.00	81.43	84.67	83.08
87.81	86.67	75.56	75.71	81.33	73.08
93.13	85.83	74.44	75.00	85.33	53.85
87.50	89.17	81.67	80.00	84.67	83.85
87.19	85.00	73.33	79.29	78.00	76.92
93.75	92.50	76.11	85.00	82.67	83.08
91.88	85.00	81.67	86.43	86.00	85.38
81.88	85.83	71.67	71.43	81.33	73.85
95.31	90.00	88.33	93.57	97.33	89.23
90.00	90.00	76.11	89.29	86.00	88.46
41.88	44.17	38.89	37.86	38.00	37.69
39.38	43.33	44.44	40.71	42.67	41.54
39.38	42.50	34.44	37.86	40.00	36.15
42.50	41.67	37.22	42.14	42.00	41.54
44.06	43.33	40.00	39.29	38.67	41.54
42.81	42.50	41.11	40.00	36.00	37.69
42.19	44.17	41.67	37.86	44.67	45.38
37.81	44.17	36.11	37.86	36.67	40.00
40.31	45.00	46.11	30.71	41.33	38.46
39.38	42.50	34.44	36.43	42.00	38.46
38.13	39.17	35.00	35.00	35.33	40.77
43.75	39.17	37.78	35.00	40.67	43.08
39.38	40.83	37.22	33.57	44.00	40.00
38.13	40.83	36.11	42.14	42.67	38.46
35.00	42.50	36.11	37.14	34.00	37.69
46.88	41.67	45.56	46.43	42.67	39.23
Total					
1552.55	1557.51	1401.10	1427.15	1488.68	1428.46
N=32	N=12	N=18	N=14	N=15	N=13

TEACHER 4

Pre Year 1			Pre Year 2		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
93.89	90.00	80.00	92.50	92.22	91.88
86.67	77.50	60.00	85.50	78.89	79.38
88.89	79.50	73.13	91.50	86.67	80.00
83.33	85.50	68.13	87.00	80.00	85.00
86.11	80.00	68.13	83.50	76.67	76.25
88.33	83.00	65.00	86.50	88.89	84.38
91.11	84.00	77.50	85.50	85.56	99.38
80.00	82.50	63.13	84.50	82.22	84.38
93.33	92.00	88.13	94.00	92.22	93.13
84.44	89.00	73.75	87.50	85.56	82.50
41.11	43.00	36.25	39.00	36.67	40.63
40.56	34.50	36.88	36.00	43.33	42.50
41.11	39.50	32.50	38.00	38.89	37.50
39.44	40.50	34.38	35.00	36.67	38.13
42.78	41.00	33.75	42.00	37.78	38.75
41.11	39.00	33.75	41.50	36.67	38.13
38.33	37.00	38.75	34.50	35.56	36.88
41.11	36.00	39.38	36.00	37.78	37.50
39.41	37.00	35.00	35.50	40.00	45.00
41.11	40.00	30.63	39.00	41.11	39.38
41.11	34.50	29.38	35.50	35.56	39.38
43.89	43.50	31.25	37.50	36.67	40.63
44.44	38.50	34.38	35.00	34.44	38.13
40.56	39.00	36.88	35.50	37.78	40.00
40.56	37.00	36.25	35.50	33.33	40.00
42.22	44.50	35.00	43.50	42.22	40.63
Total					
1534.98	1467.50	1271.31	1477.00	1453.36	1409.45
N=18	N=20	N=16	N=20	N=9	N=16

TEACHER 4

Pre Year 3			Post Year 3		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
94.84	96.32	90.00	94.00	89.52	87.37
89.68	79.47	87.86	71.33	69.05	74.74
89.68	96.32	90.00	86.00	79.05	79.47
90.65	87.89	87.14	90.00	80.95	82.11
91.61	80.00	85.00	76.00	65.71	72.63
92.26	90.00	86.43	88.00	70.00	86.32
94.19	92.11	90.00	96.00	85.71	94.74
86.45	79.47	80.71	78.00	70.00	69.74
90.32	95.26	87.86	90.67	86.67	84.74
93.87	89.47	90.71	88.67	80.00	81.58
41.94	43.68	45.00	39.33	36.67	39.47
44.19	45.26	37.14	38.00	39.52	40.00
41.29	39.47	40.00	34.00	35.71	32.63
43.23	40.53	41.43	38.00	39.05	38.95
40.65	46.84	37.14	40.67	37.62	37.89
41.61	42.63	40.71	38.67	38.57	41.05
44.52	41.05	37.86	38.67	3762	37.89
43.55	41.58	38.57	38.67	34.29	37.89
45.16	41.05	40.71	38.00	38.57	43.16
42.90	41.58	43.57	36.67	36.67	37.89
40.97	39.47	35.71	37.33	37.14	36.84
45.48	40.53	42.14	38.67	35.71	31.58
40.97	42.11	42.86	38.00	34.29	36.32
41.29	43.68	39.29	40.67	35.24	36.32
40.65	36.32	39.29	34.67	36.19	37.37
47.74	47.89	42.14	44.67	40.95	41.05
Total					
1599.69	1559.98	1519.25	1472.36	1370.47	1419.47
N=31	N=19	N=14	N=15	N=21	N=19

TEACHER 5

Pre Year 1			Pre Year 2		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
93.89	80.00	90.67	85.63	87.33	79.23
77.22	70.67	64.00	72.50	65.33	65.38
88.33	80.00	54.00	87.50	85.33	71.54
86.11	82.67	60.67	86.25	78.00	77.69
88.33	74.00	61.33	89.38	84.67	63.08
77.22	74.00	44.00	78.75	66.00	54.62
77.78	70.67	78.00	80.63	81.33	66.15
89.44	78.00	52.67	76.25	79.33	55.38
95.56	90.00	71.33	95.88	88.67	88.46
85.00	72.00	60.67	88.75	77.33	69.23
40.56	42.67	28.00	40.63	34.67	29.23
40.46	34.67	33.33	36.25	40.00	36.92
42.78	41.33	30.00	41.88	38.00	33.85
43.33	40.00	31.33	39.38	37.33	33.08
40.56	42.00	32.00	46.25	43.33	39.23
41.67	41.33	31.33	43.75	37.33	37.69
41.67	40.00	34.00	41.88	42.00	37.69
41.67	39.33	31.33	41.25	33.33	36.92
36.11	38.67	32.00	31.25	34.00	28.46
41.67	38.67	30.67	37.50	34.00	33.08
40.00	38.00	28.00	35.63	32.00	33.08
40.56	38.00	27.33	32.50	33.33	37.69
39.44	38.00	34.00	33.75	36.00	32.31
38.89	41.33	27.33	35.63	32.67	33.85
37.78	38.00	28.00	36.25	37.33	33.85
38.89	45.33	26.00	40.63	40.67	36.92
Total					
1505.02	1409.34	1121.99	1455.93	1379.31	1244.61
N=18	N=15	N=15	N=17	N=15	N=13

TEACHER 5

Pre Year 3			Post Year 3		
Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
91.11	84.55	88.00	73.68	80.00	78.33
80.28	76.36	84.00	48.95	53.33	61.67
90.00	84.55	86.67	60.00	72.22	67.50
86.94	74.55	79.33	60.00	73.33	61.67
89.72	82.73	86.67	67.89	84.44	70.83
74.17	68.18	80.67	52.63	63.33	70.83
86.94	80.00	88.00	71.58	62.22	76.67
82.50	78.18	76.67	56.32	63.33	65.83
95.00	86.36	90.67	79.47	85.56	90.00
87.50	83.64	86.00	61.58	74.44	67.50
39.72	41.82	40.00	34.74	38.89	35.00
35.00	40.00	41.33	27.37	38.89	40.00
40.00	38.18	36.00	35.26	38.89	33.33
41.67	35.45	42.67	35.79	38.89	34.17
42.50	38.18	38.67	31.58	35.56	36.67
42.22	40.91	39.33	32.63	32.22	40.83
40.56	38.18	38.67	33.68	35.56	31.67
37.50	39.09	38.67	26.84	34.44	26.67
36.94	37.27	38.67	29.47	33.33	31.67
40.56	38.18	38.00	30.53	33.38	32.50
35.56	40.91	37.33	28.95	34.44	31.67
40.56	36.36	40.67	33.68	38.89	32.50
36.39	38.18	34.00	30.00	36.67	35.00
39.44	37.27	42.67	34.74	36.67	33.33
35.83	40.00	39.33	29.47	43.33	29.17
45.28	36.36	42.00	28.95	34.44	33.33
Total					
1493.89	1415.44	1474.69	1135.78	1296.64	1248.34
N=35	N=11	N=15	N=19	N=9	N=12

APPENDIX IV

COURSE OUTLINE
Related Subjects
Laurel County Vocational School

Block I. Shop Mathematics
- a. measurements
- b. job estimation (by trade)
- c. scales
- d. use of measuring devices
- e. metric and English compare

Block II. Communication Skills
- a. dispersed throughout by trade

Block III. Job Safety
- a. protective equipment
- b. use of machines and equipment
- c. identifying hazardous situations
- d. conduct during emergency situations
- e. types of fires
- f. first aid

Block IV. Standards
- a. OSHA
- b. NEC
- c. National, state, local codes

Block V. Meter Reading
- a. watt-hour meter
- b. volt
- c. amperes
- d. ohm
- e. pressure guages
- f. temperatures
- g. conversion scales

Block VI. Blueprint
- a. basic principles
- b. terminology
- c. scales
- d. signs and symbols
- e. schematics

Block VII. Employment

a. social security
b. finding the right job
c. job resume
d. job interview
e. job application
f. on the job
g. budgeting
h. fringe benefits
i. labor unions
j. understanding pay checks
k. filing local and state tax forms

Block VIII. Customer Relations

a. definitions
b. employer and employees
c. public image
d. reflection on product
e. common courtesy
f. essentials of customer relations

Bloxk IX. Parlimentary Procedure

a. history
b. use in today's society
c. steps in organing

1ST YEAR, 1ST QUARTER

Program Begun

The Laurel County Area Vocational Center is conducting a pilot research program on two-hour block instruction in the T and I program.

The program consists of a two-hour block of instruction for sophomores, a two-hour block of instruction for juniors, and a two-hour block of instruction for seniors. This experimental program will run throughout the 1973-74 year.

The two major changes are shortening classes from three to two hours per day and admitting fifteen-year olds. This means that enrollment as a sophomore, junior, and senior would result in the same class time (at two hours per class) as was previously attained at three hours per day for two years.

There are fifty percent more new students enrolled in the program areas the first year with the number completing each eyar being the same as before.

One reason the involvement of the Laurel County Vocational Area Center was chosen is no students must be transported from distant points. All students attending the Laurel County Area Vocational Education School also attend the Laurel County High School which is on the adjoining property.

New patterns of this research program will be researched and piloted on a limited basis before acceptance at other schools in the state. Such action would have to be recommended by the Superintendent of Public Instruction and approved by the State Board.

The change is a pilot project and if not workable can be revised or dismissed when as necessary.

1ST YEAR, 4TH QUARTER

National Vocational Education Week

February 10-16 has been designated as Nantional Vocational Education Week. It will be observed throughout the county to educational institutions, teachers and students.

Mr. James Moore, Coordinator of Laurel County Vocational Education Center states that the purpose of this national observance is to bring attention to the merits and accomplishments of vocational education. Mr. Moore encourages citizens of the community to visit the school during this week to view on-going projects and programs.

Mr. Moore also states that both young people and adults today face a tremendous task of selecting career development programs. Careful investigation ans obersvation are necessary for the potential student to choose the career training program which will provide the most satisfying and rewarding careers.

The faculty of the Laurel County Area Vocational Education Center is ready to answer any questions you may have regarding Vocational Education. Come and visit with them during National Vocational Education Week, February 10-16. The school is located on Highway US 25 and is open from 8 a.m. to 4 p.m. For additional information, please call 864-9814.

The Laurel County Area Vocational Center is part of Ropes Region 13. The school was built to train high school students in Laurel County; with adult classes being offered at night. The building was built from State, Federal, and local funds. The approximate cost of the building is $300,000. The building includes five large shops, with two large related classrooms, storage areas, and office space. It gives high school students a chance to take vocational training, and to find out what field of work they would like to enter.

The Vocational Center is located on a ten-acre lot adjacent to the Laurel County High School campus with plenty of room for expansion.

The school is built of white brick and has a beautiful setting in the rolling land behind the Laurel County High School.

The staff consists of James E. Moore, Coordinator; Phyllis K. Brock, Secretary; Terry L. Owens, Drafting Instructor; J. B. Phelps, Electricity Instructor, Cleveland Wyatt, Air Conditioning, Heating & Regrigeration Instructor; Charles Hillard, Carpentry Instructor; Hiram Cornett, Auto Mechanics Instructor; and Elbert Brown and Elijah Messer custodians. Also an Orientation to the World of Work class for 10th grade students is being taught by Mrs. Tommie Lou Walden and Mrs. Wanda Mays. The Vocational Center is conducting a pilot research program on two-hour block instructions in the T&I program.

The program consist of a two-hour block of instruction for sophomores, juniors and seniors. This experimental program will run two years (1973-74 and 74-75).

The two major changes are shortening classes from three to two hours per day and admitting fifteen-year olds. This means that enrollment as a sophomore, junior and senior would result in the same class time (at two hours per class) as was previously attained at three hours per day for two years.

There are fifty percent more new students enrolled in the program areas the first year with the number completing each year being the same as before.

One reason the involvement of the Laurel County Area Vocational Center was chosen is no students must be transported from distant Points.

New patterns of this research program will be researched and piloted on a limited basis before acceptance at other schools in the state. Such action would have to be recommeded by the Superintendent of Public Instruction and approved by The State Board.

The change is a pilot project and if not workable can be revised or dismissed when as necessary.

A new Vocational School has been approved for Laurel County making a State Vocational-Technical School with the addition of seven new shops. There will be offerings for adults, high school and veterans. This facility will be equal to any other Technical School in the State. Completion date will be July 1975.

2ND YEAR, 1ST QUARTER

To Continue Two-Hour Pilot Research Project

A meeting involving personnel from the State Bureau of Vocational Education, the Region 13 office, the Laurel County Board of Education, and the staff of the Laurel County Area Vocational Education Center was held to determine the future of the Two-Hour Vocational Block of Instruction in Trade and Industrial Education at the Vocational School.

James Moore, Coordinator of Laurel County Vocational School, gave a brief summary of the Two-Hour program conducted in 1973-74. He stated that 280 students were enrolled at the vocational school last year and that only seven 16 year olds dropped out. This year a related teacher has been hired to help with problems relating to the Two-Hour block of instruction and to assist with related type of instruction.

Dr. Lynn Fluegge, Director of Division of Research, Frankfort, explained that the Two-Hour Program had not worked in other areas of the state due to transportation and communication problems. Dr. Fluegge made the following recommendations for the second year of operation of the Two-Hour Program:

—That the project be continued for another year and function under the same management and strategy.

—That the major data collection instruments be the same as those used in the first year.

—That the professional development of the teaching staff be enhanced by the implementation of in-service activities.

—That a minimum of two meetings be held to determine project status and future recommendations.

—That the amount of time the secretary works be increased from one-fourth to one-half time.

Wendell Bruce, Director of Division of Vocational Program Management, Frankfort, and Charles Wade, Director of Division of Vocational Program Development, Frankfort, made the following statements: "Laurel County Vocational School is breaking new grounds with the Two-Hour Program. It is a very unique program and it is being looked at very closely. People are concerned about the conclusion of the program. This program may affect other programs of this kind in other parts of the state. The Two-Hour Project at the Laurel County Vocational School will make a major contribution to vocational education, to the county, to the area, and to the state."

Other speakers on the program were: Ray Roundtree, Director of Vocational Education Programs, ROPES Region 13; Hayward Gilliam, Superintendent of Laurel County Schools; Dr. Robert Ogle, Assistant Director of Industrial Education, Eastern Kentucky University; Harold Storms, Principal of Laurel County High School, and Dr. Robert N. Schneider, Director of Educational Resources Development Unit, Frankfort.

3RD YEAR, 1ST QUARTER

Vocational School Receives Funds For Class Project

Funding for the two-hour vocational class project at Laurel County Vocational School in London has been approved by the Bureau of Vocational education in the Kentucky Department of Education for the third year.

The $15,810 project allows sophomore, junior and senior students to enroll in vocational classes for two hours a day rather than the more conventional program of three hours a day opened only to junior and senior students. The primary purpose of the project is to determine the effectiveness of such a program. The project is partially funded by the state's portion offunds from the Vocational Education Amendments of 1968.

James E. Moore, coordinator, Laurel County Area Vocational School, is program director.